

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY POWER COMPANY FOR )	
CERTIFICATE OF PUBLIC CONVENIENCE AND )	
NECESSITY TO CONSTRUCT AND INSTALL )	CASE NO. 95-403
VARIOUS FACILITIES TO REINFORCE THE )	
TRANSMISSION SYSTEM IN THE INEZ AND TRI- )	
STATE AREAS )	

O R D E R

On September 19, 1995, Kentucky Power Company ("Kentucky Power"), doing business as American Electric Power Company, filed an application for a Certificate of Public Convenience and Necessity to construct approximately 52 miles of 138 KV transmission lines, to upgrade 35 miles of 138 KV transmission lines and to install various facilities to reinforce the transmission system in the Inez and Tri-state areas of eastern Kentucky. Kentucky Power's portion of the proposed facilities was estimated to cost \$84.2 million with the Electric Power Research Institute providing \$3.5 million for part of the project.

The project will be financed initially with short-term borrowings which will be replaced with long-term financing at appropriate intervals. The long-term financing could be first mortgage bonds, bank loans, unsecured notes, or equity contributions from its parent, AEP. A portion of the financing is currently pending Commission approval and additional financing applications will be filed in the future.

The Attorney General's Public Service Litigation Branch ("AG") and Kentucky Industrial Utility Customers, Inc. ("KIUC") intervened in this proceeding and a procedural schedule was established for conducting discovery. On April 4, 1996, Kentucky Power filed a motion to submit this case for a decision on the existing record without a public hearing. The AG expressed no objection and by Order dated April 23, 1996 the motion was granted.

The AEP system, of which Kentucky Power is a member, designs its transmission systems to operate under double-contingency outage conditions, but the transmission system in the Inez area currently operates under single-contingency outage conditions. Due to load growth in the area, load flow studies for the projected Winter 1996-1997 Load indicate that under several single-contingency outages, service to the entire Inez area will be jeopardized due to unacceptable voltages and thermal overloading conditions. In the Tri-state area, the 138 KV transmission system needs to be reinforced to meet double-contingency outage conditions.

Kentucky Power seeks authorization to construct facilities to upgrade and reinforce its transmission system as follows:

By December 1996:

- Install a 600 MVA, 345/138 KV transformer at the Baker/Big Sandy Station.
- Install a 138 KV, 8% series reactor on the Dewey circuit at the Big Sandy Station.
- Install a 161 KV, 8% series reactor on the Pineville circuit at the Leslie Station.

- Install a  $\pm 160$  MVAR shunt inverter static compensator (STATCOM) at the Inez 138 KV Station.

By December 1997:

- Construct a 35 mile long, 138 KV line between the Big Sandy and Inez stations.
- Install two 138 KV 52.8 MVAR shunt capacitor banks at the Inez Station.
- At the Inez Station, install a  $\pm 100$  MVAR series inverter on the Big Sandy-Inez 138 KV line. This together with the shunt inverter will create a Unified Power Flow Controller (UPFC) device.

By December 1998:

- Construct a 17 mile long, 138 KV line between the Inez and Johns Creek stations.
- Upgrade the existing 22 mile long Beaver Creek-Johns Creek 138 KV line.

By December 1999:

- Upgrade the existing 13 mile long Sprigg-Johns Creek 138 KV line.

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that public convenience and necessity require the construction of the requested facilities to upgrade and reinforce the transmission system in the Inez and Tri-State areas.

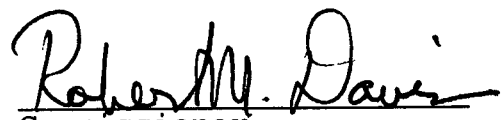
IT IS THEREFORE ORDERED that Kentucky Power be and it hereby is granted a Certificate of Public Convenience and Necessity to construct the transmission facilities described in its application.

Done at Frankfort, Kentucky, this 11th day of June, 1996.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

  
Executive Director